Search less ground. Find more deposits.

OreRank tells an exploration company where to look first inside its licence, anywhere in the world: every public clue about the ground, ranked in a minute, then satellite and hyperspectral evidence, then local geologists who check the best targets. Every method is blind-tested and the results are published, failures included.

4.9× more proven deposits per area searched, outside the US, on every continent (16,124 deposits; 3.5× in the first test)	**238,872** public mineralisation records: 155 countries plus 13 national and state databases, cleaned and ranked	**1 min** from licence coordinates to a ranked map and satellite coverage	**US$12.4 bn** global exploration spend in 2025 (S&P Global)

1. The problem

Exploration licences cover thousands of hectares, but a field season pays for a few dozen sampling points and a handful of drill holes. Most exploration money is spent on ground that yields nothing. Early-stage budgets fell to a record-low share of total spend in 2025 (about one fifth, S&P Global), so companies must choose where to look with less money than ever.

2. Why now?

- **The data became free and global.** NASA EMIT (2022) and Germany's EnMAP (2022) map surface minerals from space; Sentinel has a ten-year archive. Ten years ago this cost hundreds of thousands per survey.
- **Cloud catalogues made global processing cheap.** Planetary Computer and NASA's cloud archives let a small team scan any licence on Earth.
- **Demand for critical minerals.** Governments are opening licence rounds (Kazakhstan, Türkiye, the EU's 46 new strategic projects), and lenders and communities expect independent evidence after recent tailings and heap-leach failures.

3. Why hasn't anyone else done this?

WHO	WHAT THEY DO	WHY THEY DO NOT SERVE THIS CUSTOMER
AI exploration companies	Raise large funds and use AI to find deposits for themselves	Their business is owning discoveries, not serving other licence holders
Geological consultancies	Sell geologist days and field seasons	Paid by the day: no incentive to answer in a minute; work is local, not global
Satellite analytics firms	Sell imagery and radar monitoring to major miners	Priced for majors; no geology workflow, no field verification
Data platforms and surveys	Publish records and maps	Data, not decisions; national, not cross-border; no ranking

Why has no one thought of it?

They did, in pieces. What is hard is doing all of it at once: cleaning 155 countries of messy records without leaking answers into the tests, reading national licence formats as written, running a field network with locked targets, and publishing honest results. Our tests also showed something the AI vendors have no incentive to say: on global data, a disciplined ranking by known mineralisation beats coarse geophysics AI. We built the product around what the evidence supports, not around the most impressive-sounding technology.

4. Our difference

Proven, and honest about it

Pre-registered blind tests on global data. We publish what passed (4.9×, every continent) and what failed (models on unseen continents, famous districts).

Global in a minute

Any licence, any country, from the coordinates in the permit. Consultancies need a season; data platforms leave the analysis to you.

Checked on the ground

Local geologists, targets locked with a hash before the visit, automatic QA, random audit re-visits. Every result, hit or miss, improves the next ranking.

Also: priced for mid-size companies, not majors; reports in the vocabulary of permit and EIA files; independent of operators, which lenders and communities value.

5. What is proven, and what is not yet

CAPABILITY	STATUS
Known-mineralisation ranking	• Proven: 4.9×, every continent
Time-honest check: pre-1960 records only	• Proven: found later deposits at 1.8×
Regional geophysics models (trained in the continent)	• Proven and replicated: 2.3× and 3.8× on two independent sets
Adding a country's national occurrence database	• Proven in 4 of 4 countries: +20 to +58 points (Australia, British Columbia, Brazil, Sweden)
National airborne magnetics (where a free grid exists)	• Proven in Australia: beats global grids (23% → 33%); small gain on top of showings (+3.3 points); none for rare earths
Evidence for JORC / NI 43-101 / UMREK reports	Working: Table 1 pack and drafts for the Competent Person; we never estimate resources
Monitor: footprint and farmland filter	Working; farmland false signal cut by up to 65%
Hyperspectral mineral maps (EMIT)	Integrated as a mineral map; failed two blind tests for targeting
Radar early warning (InSAR)	Measures pad and pit deformation; not a failure warning: the same alert fired at 5 of 8 stable heap-leach mines
AI on coarse global geophysics	Not proven on unseen continents: we do not sell it as discovery
Picking rich drill holes inside a drilled prospect	Failed (18,600 holes, Western Australia): our rankings choose ground at the 1–10 km scale, not holes

6. Business model

REVENUE LINE	CUSTOMER	HOW IT IS CHARGED
Screen	New licence holders, juniors	Per licence report (anchored to a consultant desk study)
Monitor	Operating mines, lenders, ESG teams	Monthly subscription per site
Field checks	Screen customers	Per verified target; margin over partner pay
Portfolio and API	Groups with many licences, state agencies, investors	Annual licence

Planning assumption, to be tested with pilots: year-3 revenue of €2–4 million, for example 150 Screen reports and 40 Monitor subscriptions a year. Prices are an owner decision still open.

7. Future plans

01
Soft launch (about 4–6 weeks after company, domain, hosting and prices are set): invited, paid pilots.

02
December 2026: three Screen pilots signed; targets locked before field visits.

03
Early 2027: validation scorecard v1; next hyperspectral test with band-depth features and EnMAP (30 m); radar rule based on each pad's own acceleration.

04
Spring 2027: field verification of pilot targets; first case studies.

05
June 2027: full commercial launch; regional models where tests showed signal (Africa, Oceania, Canada).

06
Late 2027: new country entries with local field partners; ten paying customers; radar deformation monitoring for pads and pits.

8. Main risks

No paying customers yet; pilots must show value in the field. The satellite models do not yet transfer to unseen continents, hyperspectral alteration classes failed their first blind test, and the radar alert is not failure-specific. Sales cycles in mining are long. Our answer to each is the same: lock predictions before the field, publish the outcome, and sell only what the evidence supports.

See the evidence

Every test, method and failure: the Proof page on our website.

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Targets are places to check in the field, not resources or reserves. Market figure: S&P Global, World Exploration Trends 2026. Revenue figures are planning assumptions.